# 2.2.3.13 Central Sand Plains Ecological Landscape

## General Description

The Central Sand Plains Ecological Landscape, located in central Wisconsin (Figure 2-39), occurs on a flat, sandy lake plain, and supports agriculture, forestry, recreation, and wildlife management. The Ecological Landscape formed in and around what was once Glacial Lake Wisconsin, which contained glacial meltwater extending over 1.1 million acres at its highest stage. Soils are primarily sandy lake deposits, some with silt-loam loess caps. Sandstone buttes carved by rapid drainage of the glacial lake, or by wave action when they existed as islands in the lake, are distinctive features of this landscape.

# Vegetation

The historic vegetation of the area included extensive wetlands of many types, including open bogs, shrub swamps, and sedge meadows. Prairies, oak forests, savannas, and barrens also occurred in the Ecological Landscape. An area of more mesic forest with white pine and hemlock was found in the northwest portion, including a significant pinery in eastern Jackson County.

Today, nearly half of the Ecological Landscape is nonforested, in agriculture and grassland (Figure 2-40). Most of the historic wetlands were drained early in the 1900s and are now used for vegetable cropping. The forested portion is mostly oak-dominated forest, followed by aspen and pines. A minor portion is maple-basswood forest and lowland hardwoods.

### Hydrologic Features

The Wisconsin River is the largest river that flows through the Ecological Landscape; other significant river corridors include the Black River, East Fork of Black River, Yellow River, and Lower

Lemonweir River. There are no large, naturally-occurring lakes. The lakes and rivers of the Ecological Landscape are relatively unpolluted. Groundwater rankings by the Wisconsin DNR indicate that this Ecological Landscape is quite polluted as compared with other areas of Wisconsin. Only the Central Sand Hills has a more severe groundwater pollution ranking.

#### Land Use

The total land area for the Central Sand Plains Ecological Landscape is approximately 2 million acres, of which 56% is classified as timberland. Approximately one-quarter of the Ecological Landscape is publicly owned (Figure 2-41). Most of these lands are in county and municipal ownership, but they also include the Black River State Forest and the Necedah National Wildlife Refuge.



Figure 2-39. Central Sand Plains Ecological Landscape.

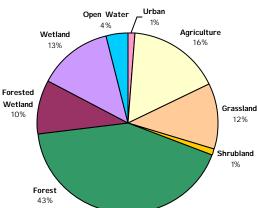


Figure 2-40. Current land cover in the Central Sand Plains Ecological Landscape.

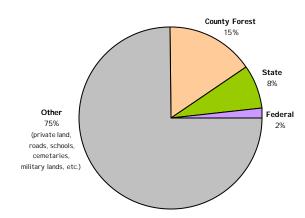


Figure 2-41. Public land ownership in the Central Sand Plains Ecological Landscape.

## Socioeconomics

Socioeconomic data are summarized based on county-level approximations of the Ecological Landscape (referred to as a "region"). Economic data are available only on a political unit basis with counties as the smallest unit. The counties included in this socioeconomic region are Adams, Clark, Jackson, Juneau, Monroe, Portage, and Wood ("Central Sands Region").

The principal land uses within this region are agriculture, cranberry production, and timber production. Three counties are top producers of several crops and together produce half the state's potatoes. Jackson and Wood counties are the top cranberry producers in the state. Agriculture is relatively important compared with other regions, and the forest products and processing industries account for 17% of the region's industrial output compared to 8% statewide.

Compared to other regions in the state the Central Sand Plains Region is nearly average in most socioeconomic indicators with some exceptions. The population density is slightly less than half (44 persons/mi²) that of the state as a whole (96 persons/mi²). Its population is comparatively younger and less racially diverse than the other regions, and it has the second lowest number of high school and college graduates. Economically, most of the indicators are around the statewide averages with a somewhat below-average per capita income.

## Management Opportunities

- Protection of sandstone buttes and cliffs of geological importance.
- Large-scale barrens, savanna, and prairie restoration, and management of associated grassland and shrubland birds (such as that at Buena Vista Marsh, Meadow Valley, and Necedah).
- Potential habitat exists for Karner blue butterfly management and many other rare barrens-associated species.
- Public lands are extensive enough to support management for animals that are wide-ranging or have large home range requirements, such as wolves, black bear, elk, and bobcat.
- Management to maintain and enhance whooping and sandhill crane habitat, and to restore habitat for migratory waterfowl.
- Management for rare herptiles including the Eastern massasauga rattlesnake and Blanding's turtle.
- Restoration of pine forests, including natural red pine areas.
- Creation of large habitat patches including forests, barrens, and wetlands for species with specific area and community needs.
- Restoration of wetlands such as bogs, large peatlands, sedge meadows, and spruce-tamarack swamps.
- Restoration and management of the Dells of the Wisconsin River.
- Remaining small streams with headwaters in non-agricultural areas are rare and present an opportunity for protection.
- River corridors, including the Black River, East Fork of Black River, Yellow River, and Lower Lemonweir River are potential areas for protection and restoration and/or acquisition.
- Management and protection of wintering bald eagles and eagle migration areas along the Wisconsin River corridor.

# **Natural Communities**

The following table (Table 2-15) lists the natural communities occurring in the Central Sand Plains arranged by the level of opportunity to sustain and manage the community type in this Ecological Landscape. For further explanation of natural communities and opportunities to sustain them, see Section 3.3.

Table 2-15. Natural communities occurring in the Central Sand Plains arranged by the levelof opportunity to sustain and manage the natural community type in this Ecological Landscape.

Major Opportunity	Important Opportunity	Present
Northern Wet Forest	Northern Dry Forest	Hemlock Relict
Central Sands Pine-Oak Forest	Northern Dry-Mesic Forest	Pine Relict
Floodplain Forest	Northern Hardwood Swamp	Cedar Glade
Southern Dry-Mesic Forest	Northern Mesic Forest	Oak Woodland
White Pine-Red Maple Swamp	Southern Dry Forest	Mesic Prairie
Oak Barrens	Southern Mesic Forest	Emergent Aquatic-Wild Rice
Pine Barrens	Southern Tamarack Swamp	Calcareous Fen (Southern)
Sand Prairie	Dry-Mesic Prairie	Wet-Mesic Prairie
Alder Thicket	Dry Prairie	Wet Prairie
Northern Sedge Meadow	Emergent Aquatic	Bedrock Glade
Open Bog	Submergent Aquatic	Inland Beach
Shrub Carr	Coastal Plain Marsh	
Dry Cliff	Southern Sedge Meadow	
	Moist Cliff	